



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT 1

DOCKET NO. 50-313

INTRODUCTION

By letter dated October 9, 1984, Arkansas Power and Light Company (AP&L or the licensee) requested amendment to the Technical Specifications (TSs) appended to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit 1 (ANO-1). The proposed changes would modify the TSs to permit the ten-year hydrostatic test of the secondary system to be performed using steam in lieu of water.

DISCUSSION

The Inservice Inspection Program for ANO-1 is based on the 1974 Edition of Section XI of the ASME Code (the Code) which requires Class 2 systems to be hydrostatic tested at 1.25 times the design pressure of the system. The main steam system is unisolated from the steam relief headers and the hydrostatic test pressure is higher than the set pressures of the main steam relief valves. Therefore, to accomplish the test requirements, AP&L proposes to gag 14 relief valves (render the valves such that they would not open), reset two at a higher pressure than the test pressure, and utilize reactor coolant pump heat to produce steam as the pressurizing medium as allowed by the 1980 Edition of Section XI of the Code. As presently written, Technical Specification 3.4.1.2 requires that 14 relief valves be operable if reactor coolant temperature is above 280°F. The proposed change would make an exception to this specification when the reactor is in a subcritical mode of operation and the secondary system hydrostatic test is performed.

EVALUATION

We have reviewed the proposed changes to the hydrostatic test and the Technical Specification. The hydrostatic test will be performed in accordance with the requirements of the 1974 Edition of Section XI except that steam in lieu of water will be used to pressurize the secondary system. This is allowed in the later edition of the Code which has been approved by the Commission. The relieving capacity of the two relief valves is much greater than the energy generated by decay heat and reactor coolant pump heat thereby providing overpressure protection in accordance with Section III of the Code. We, therefore, find that the proposed Technical Specification change to accommodate the performance of the hydrostatic test will not affect plant safety and is acceptable.

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ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 20, 1984

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